

AMENDMENTS TO THE CLAIMS

Claims 1 and 9 have been amended, and claims 21-24 have been added. The following is a complete listing of the claims, which replace all previous versions and listings of the claims.

1. (currently amended) A method for operating a computing device, comprising:
tabulating resources of the computing device into one or more resource tables;
allocating resources from one or more of the resource tables of the computing device to a plurality of resource sets prior to loading a desired O/S layer for the computing device ~~wherein allocating resources comprises cloning a portion of the resources and allocating the original portion of the resources and a clone portion of the resources to different resource sets; and~~
loading a desired operating system on each set of the plurality of resource sets at the desired O/S layer.
2. (original) The method of claim 1, wherein allocating resources comprises organizing the resources in a ROM-based environment.
3. (original) The method of claim 2, wherein organizing the resources in the ROM-based environment comprises gathering device data from a BIOS module.
4. (original) The method of claim 1, wherein allocating resources comprises dividing the resources in an initialization phase of the computing device.
5. (original) The method of claim 4, wherein allocating resources comprises sharing at least a portion of the resources.

6. (original) The method of claim 1, wherein allocating resources comprises identifying and initializing at least a portion of the resources.

7. (original) The method of claim 1, wherein allocating comprises manually selecting desired allocations of the resources via a user interface.

8. (original) The method of claim 1, comprising running multiple desired operating systems at the desired O/S layer on the computing device.

9. (currently amended) A method for simultaneously supporting a plurality of independent operating systems on a computing device, comprising:

cataloguing resources of the computing devices prior to O/S booting for the computing device;

dividing the resources into multiple subsets prior to O/S booting wherein dividing the resources comprises partitioning the resources with an extensible firmware interface ~~cloning a portion of the resources and allocating the original portion of the resources and the cloned portion of the resources to different subsets;~~ and

loading the plurality of independent operating systems, at least one O/S being loaded on each resource set of the multiple subsets.

10. (original) The method of claim 9, wherein the plurality of independent operating systems provide independent platforms for loading and running application software.

11. (original) The method of claim 10, wherein cataloguing, dividing and loading are performed in an initialization phase of the computing device.

12. (original) The method of claim 9, wherein dividing the resources comprises allocating desired portions of hardware and system services to each of the multiple subsets.

13. (original) The method of claim 12, wherein allocating desired portions of hardware and system services comprises sharing the system services between the multiple subsets and the independent operating systems loaded thereon.

14. (previously presented) A system for booting a computing device, comprising:
an extensible firmware interface comprising:
a resource tabulator module configured to organize data on
system resources for the computing device; and
a resource divider module configured to create multiple resource
sets for the computing device; and
an operating system loader module configured to load a desired operating
system on each of the multiple resource sets.

15. (original) The system of claim 14, wherein the resource tabulator module and the resource divider module are disposed in a pre-boot environment.

16. (original) The system of claim 15, wherein the resource tabulator module and the resource divider module are disposed in ROM.

17. (original) The system of claim 14, wherein the pre-boot environment comprises hardware detection modules for the system resources.

18. (original) The system of claim 14, wherein the pre-boot environment comprises hardware driver modules for the system resources.

19. (original) The system of claim 14, wherein the resource divider module comprises a user interface.

20. (original) The system of claim 14, wherein the resource divider module comprises a hardware partitioning module.

21. (new) A system comprising:
a resource tabulator module configured to obtain resource tables associated with a computing device;
a resource divider module configured to create multiple resource sets from the resource tables;
an operating system loader module configured to load a desired operating system on each of the multiple resource sets; and
an interrupt controller module configured to detect and deliver interrupts to at least one of the operating systems through a peripheral components interconnect ("PCI") bus.

22. (new) The system of claim 21, comprising redirection registers, wherein the interrupt controller module is configured to communicate through the PCI bus via the redirection registers.

23. (new) The system of claim 22, wherein the redirection registers comprise extended identifiers for identifying a processor within one of the resource sets.

24. (new) The system of claim 21, wherein the interrupt controller module comprises a legacy system.